

Appendix A: Effective (Isotropic) Radiated Power Output Data for NB1

Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	Conducted POWER(d Bm)	EIRP(dB m)	Verdict
Band 25	Stand- Alone	3.75k Hz	0.18	QPSK	26042	1@0	22.50	24.37	PASS
Band 25	Stand- Alone	3.75k Hz	0.18	QPSK	26042	1@47	22.52	24.39	PASS
Band 25	Stand- Alone	3.75k Hz	0.18	BPSK	26042	1@0	22.41	24.28	PASS
Band 25	Stand- Alone	3.75k Hz	0.18	BPSK	26042	1@47	22.49	24.36	PASS
Band 25	Stand- Alone	3.75k Hz	0.18	QPSK	26365	1@0	22.33	24.2	PASS
Band 25	Stand- Alone	3.75k Hz	0.18	QPSK	26365	1@47	22.30	24.17	PASS
Band 25	Stand- Alone	3.75k Hz	0.18	BPSK	26365	1@0	22.30	24.17	PASS
Band 25	Stand- Alone	3.75k Hz	0.18	BPSK	26365	1@47	22.35	24.22	PASS
Band 25	Stand- Alone	3.75k Hz	0.18	QPSK	26688	1@0	22.65	24.52	PASS
Band 25	Stand- Alone	3.75k Hz	0.18	QPSK	26688	1@47	22.61	24.48	PASS
Band 25	Stand- Alone	3.75k Hz	0.18	BPSK	26688	1@0	22.55	24.42	PASS
Band 25	Stand- Alone	3.75k Hz	0.18	BPSK	26688	1@47	22.61	24.48	PASS
Band 25	Stand- Alone	15kHz	0.18	QPSK	26042	1@0	22.72	24.59	PASS
Band 25	Stand- Alone	15kHz	0.18	QPSK	26042	1@11	22.73	24.6	PASS
Band 25	Stand- Alone	15kHz	0.18	QPSK	26042	3@3	23.32	25.19	PASS
Band 25	Stand- Alone	15kHz	0.18	BPSK	26042	1@0	22.70	24.57	PASS
Band 25	Stand- Alone	15kHz	0.18	BPSK	26042	1@11	22.71	24.58	PASS

Band 25	Stand- Alone	15kHz	0.18	QPSK	26365	1@0	22.53	24.4	PASS
Band 25	Stand- Alone	15kHz	0.18	QPSK	26365	1@11	22.56	24.43	PASS
Band 25	Stand- Alone	15kHz	0.18	QPSK	26365	3@3	23.22	25.09	PASS
Band 25	Stand- Alone	15kHz	0.18	BPSK	26365	1@0	22.52	24.39	PASS
Band 25	Stand- Alone	15kHz	0.18	BPSK	26365	1@11	22.54	24.41	PASS
Band 25	Stand- Alone	15kHz	0.18	QPSK	26688	1@0	22.76	24.63	PASS
Band 25	Stand- Alone	15kHz	0.18	QPSK	26688	1@11	22.79	24.66	PASS
Band 25	Stand- Alone	15kHz	0.18	QPSK	26688	3@3	23.48	25.35	PASS
Band 25	Stand- Alone	15kHz	0.18	BPSK	26688	1@0	22.75	24.62	PASS
Band 25	Stand- Alone	15kHz	0.18	BPSK	26688	1@11	22.79	24.66	PASS

Appendix B: Peak-to-Average Ratio(CCDF) for NB1

Test Result

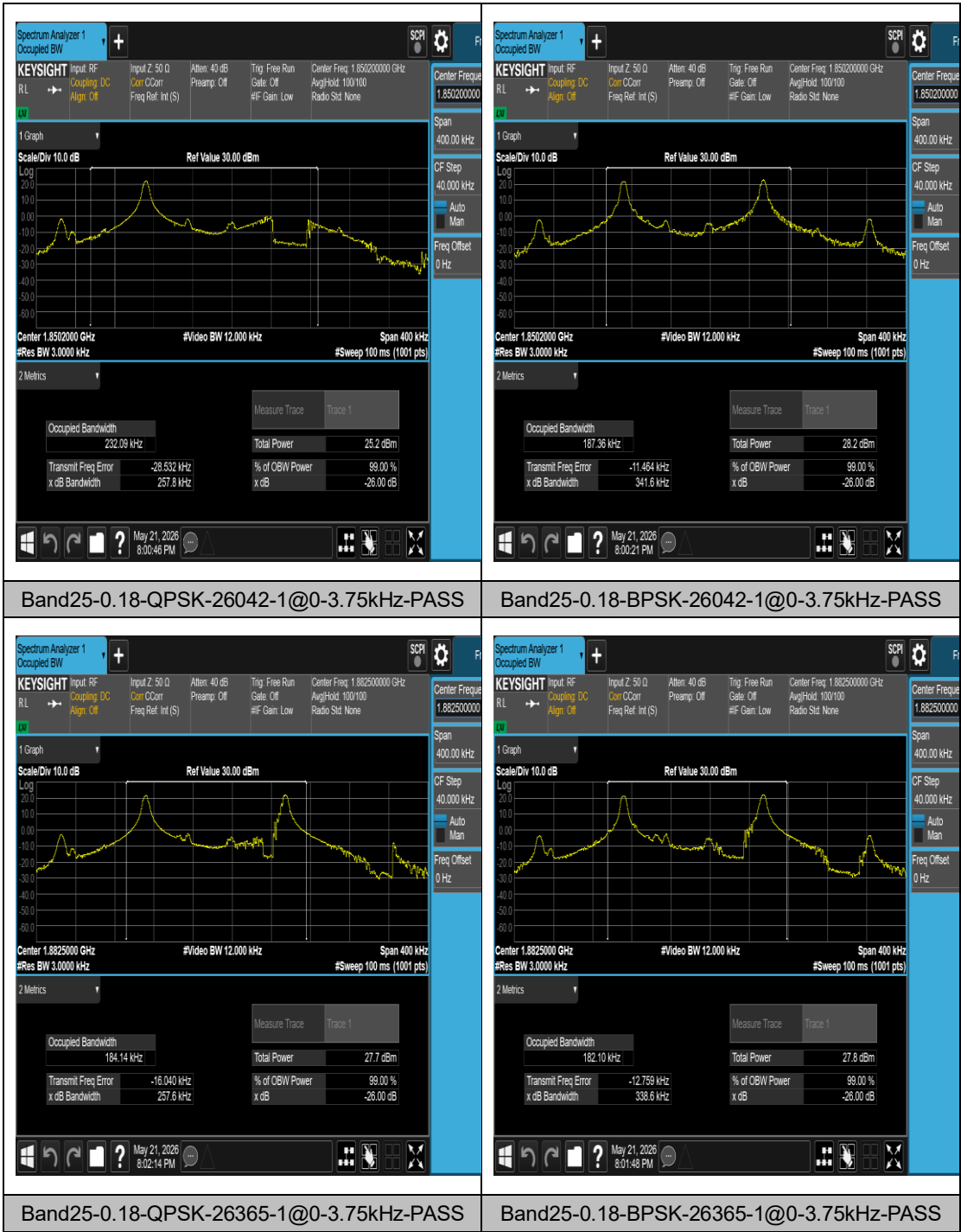
Band	OpMode	SCS	BW	Modulation	Channel	Tones	Result (dBm)	Limit (dBm)	Verdict
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	4.98	<=13	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@47	5.02	<=13	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26365	1@0	5	<=13	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26365	1@47	4.99	<=13	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	6.14	<=13	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@11	6.25	<=13	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	3@3	12.72	<=13	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26365	1@0	6.14	<=13	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26365	1@11	6.01	<=13	PASS

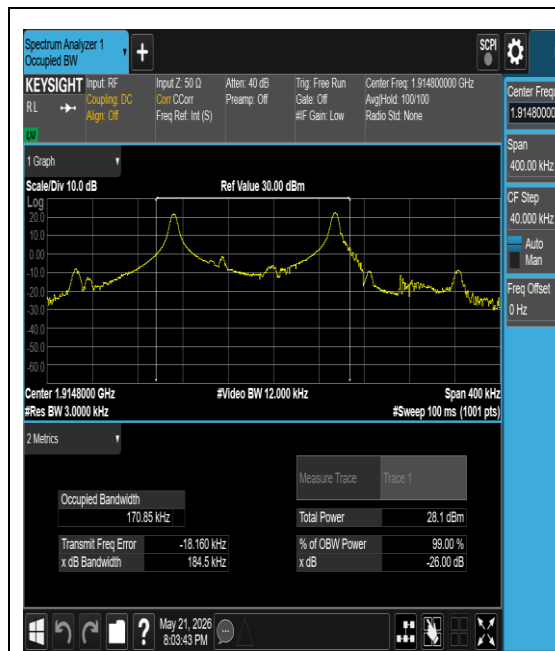
Appendix C: Emission Bandwidth for NB1

Test Result

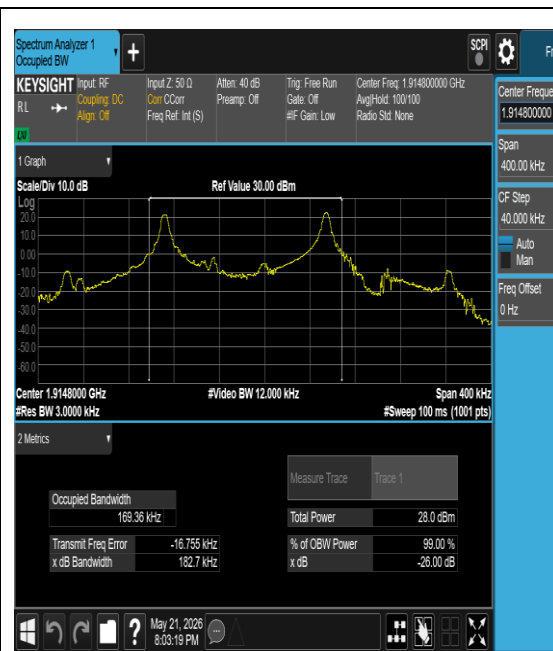
Band	OpMode	SCS	BW	Modulation	Channel	Tones	OBW(MHz)	EBW(MHz)	Verdict
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@0	0.23209	0.2578	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26042	1@0	0.18736	0.3416	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	0.18414	0.2576	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26365	1@0	0.18210	0.3386	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@0	0.17085	0.1845	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26688	1@0	0.16936	0.1827	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26042	12@0	0.20874	0.2656	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26042	12@0	0.20758	0.2789	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	12@0	0.20395	0.2693	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26365	12@0	0.20888	0.2650	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26688	12@0	0.20108	0.2390	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26688	12@0	0.19746	0.2499	PASS

Test Graphs

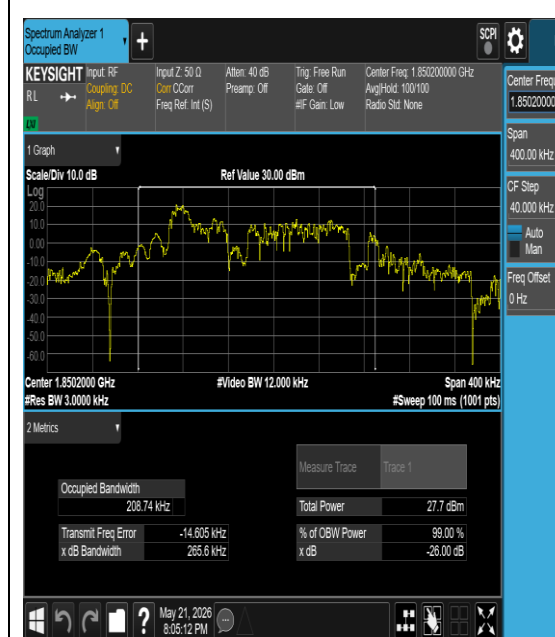




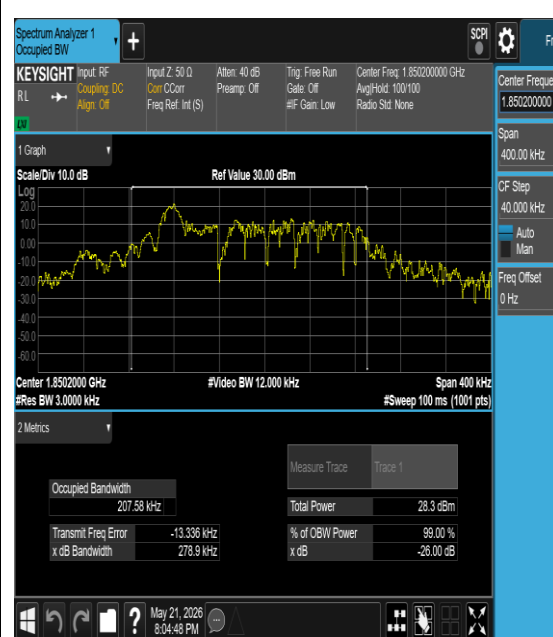
Band25-0.18-QPSK-26688-1@0-3.75kHz-PASS



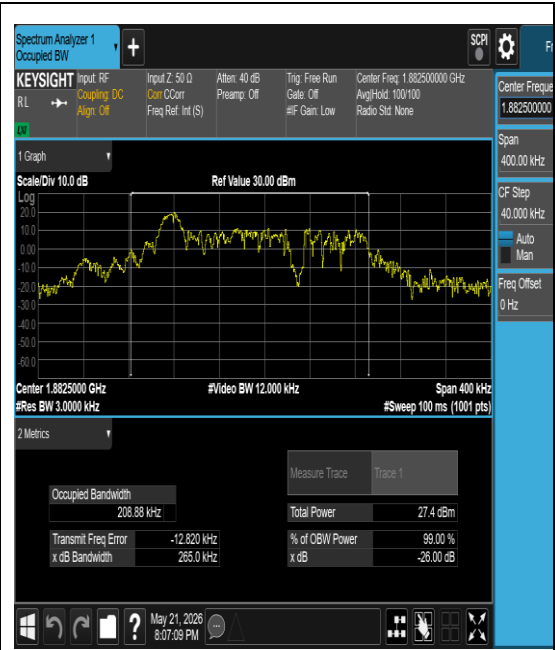
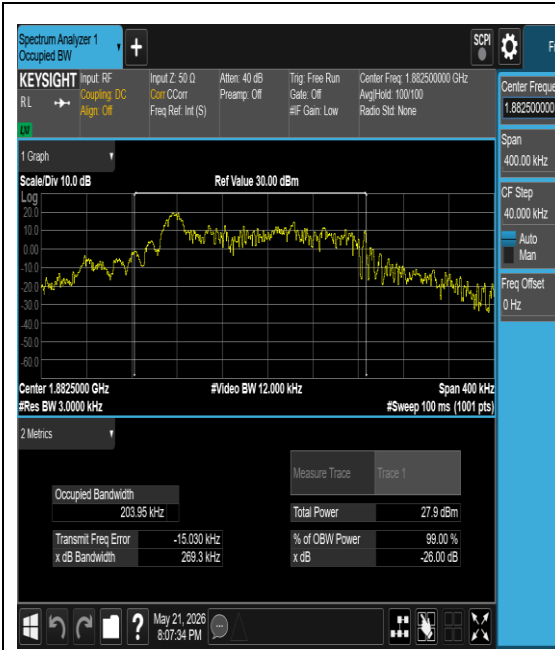
Band25-0.18-BPSK-26688-1@0-3.75kHz-PASS



Band25-0.18-QPSK-26042-12@0-15kHz-PASS

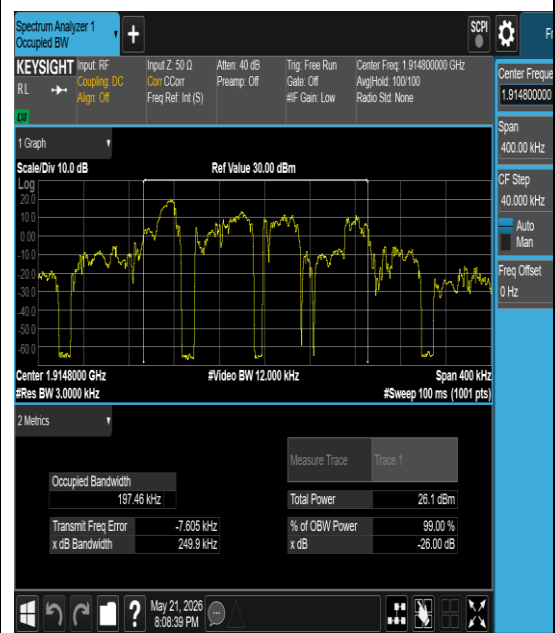
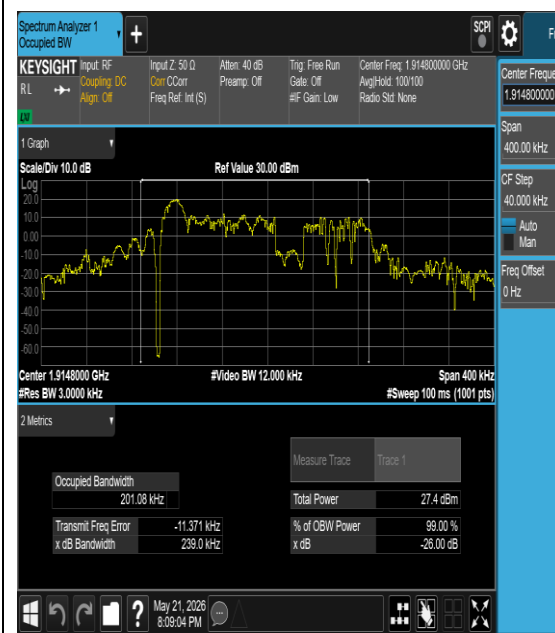


Band25-0.18-BPSK-26042-12@0-15kHz-PASS



Band25-0.18-QPSK-26365-12@0-15kHz-PASS

Band25-0.18-BPSK-26365-12@0-15kHz-PASS



Band25-0.18-QPSK-26688-12@0-15kHz-PASS

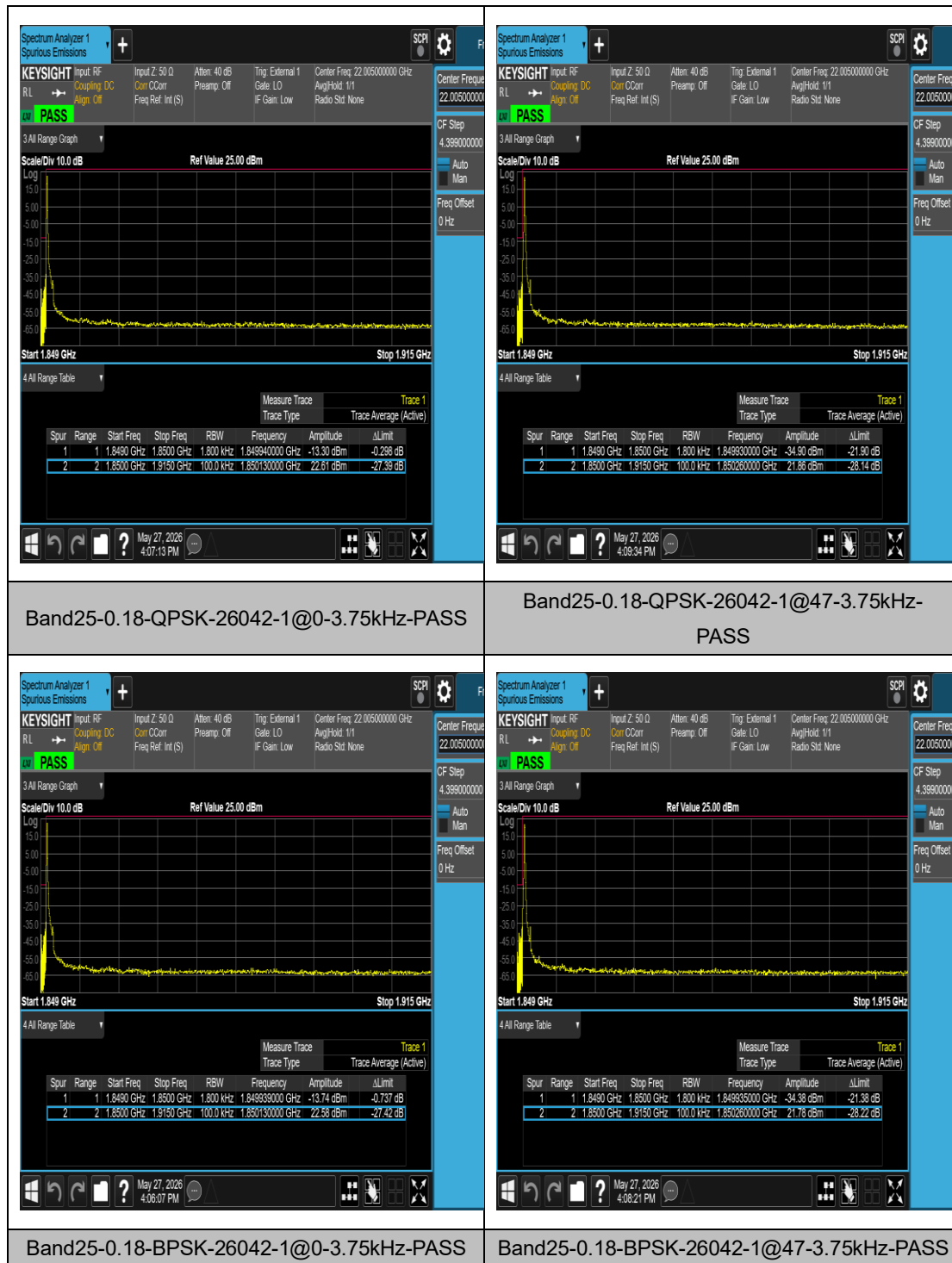
Band25-0.18-BPSK-26688-12@0-15kHz-PASS

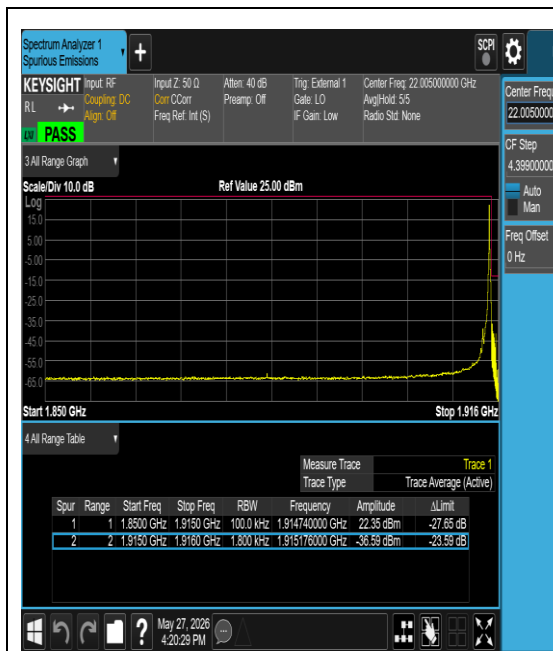
Appendix D: Band Edge for NB1

Test Result

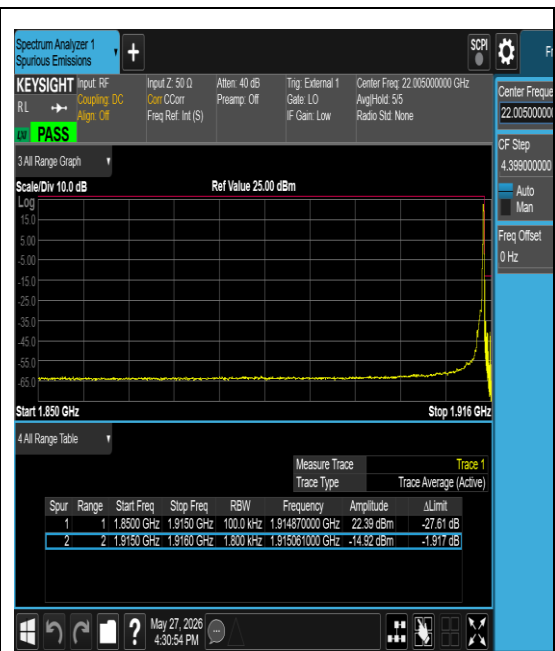
Band	OpMode	SCS	BW	Modulation	Channel	Tones	Result (dBm)	Verdict
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@0	-13.30	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@47	-34.90	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26042	1@0	-13.74	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26042	1@47	-34.38	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@0	-36.59	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@47	-14.92	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26688	1@0	-34.46	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26688	1@47	-15.21	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26042	1@0	-19.48	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26042	1@11	-34.37	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26042	12@0	-29.58	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26042	1@0	-16.16	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26042	1@11	-33.58	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26688	1@0	-34.91	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26688	1@11	-18.93	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26688	12@0	-28.77	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26688	1@0	-35.04	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26688	1@11	-16.91	PASS

Test Graphs

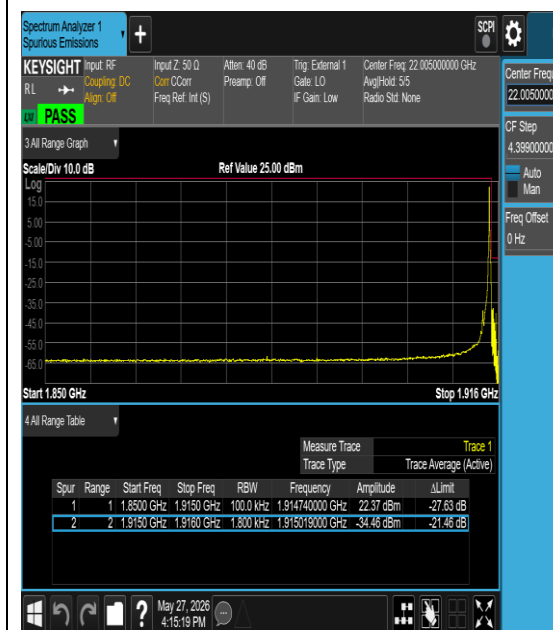




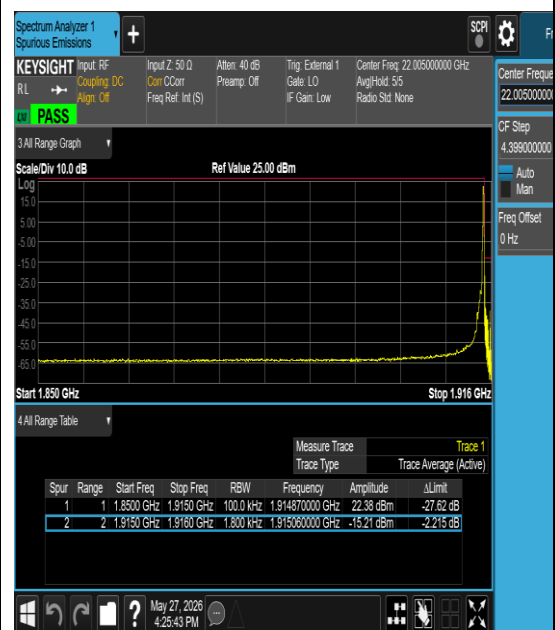
Band25-0.18-QPSK-26688-1@0-3.75kHz-PASS



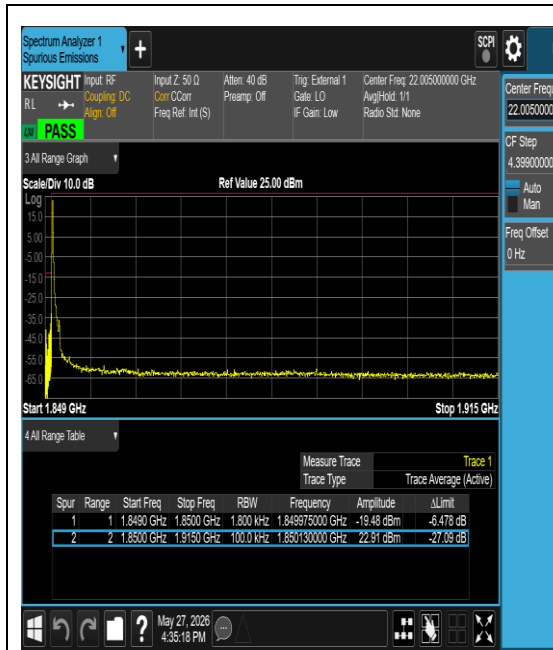
Band25-0.18-QPSK-26688-1@47-3.75kHz-
PASS



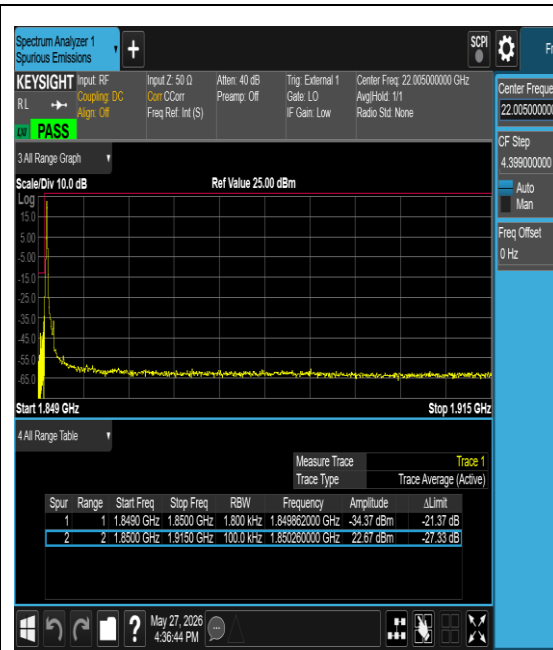
Band25-0.18-BPSK-26688-1@0-3.75kHz-PASS



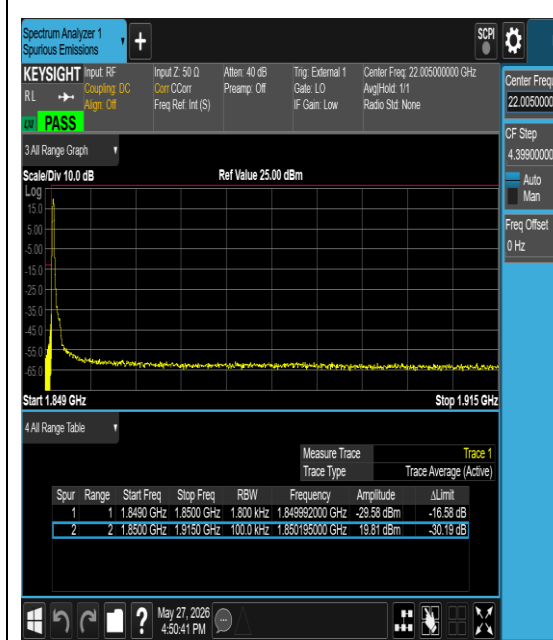
Band25-0.18-BPSK-26688-1@47-3.75kHz-PASS



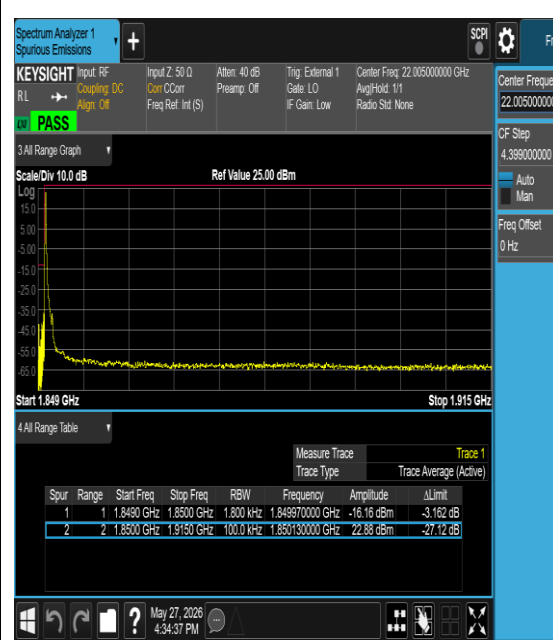
Band25-0.18-QPSK-26042-1@0-15kHz-PASS



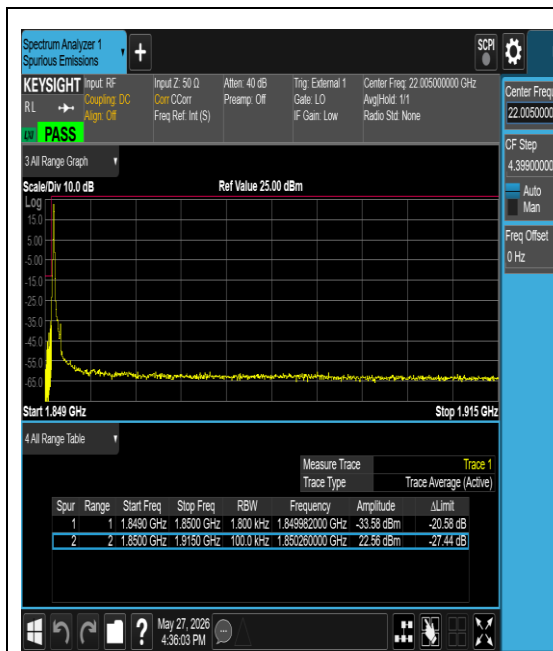
Band25-0.18-QPSK-26042-1@11-15kHz-PASS



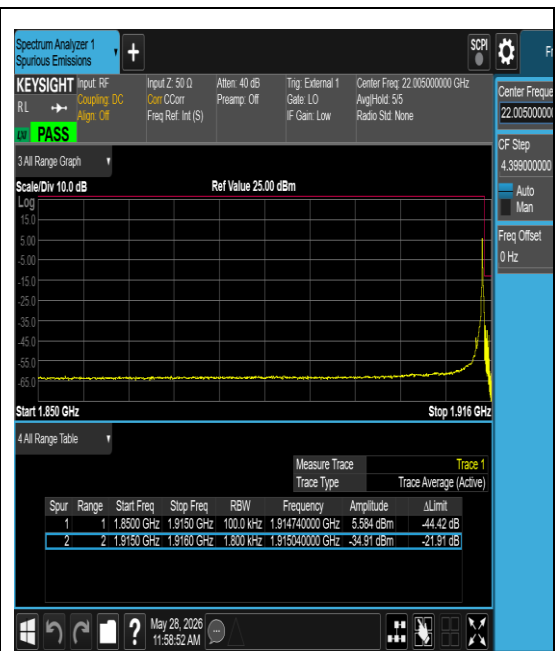
Band25-0.18-QPSK-26042-12@0-15kHz-PASS



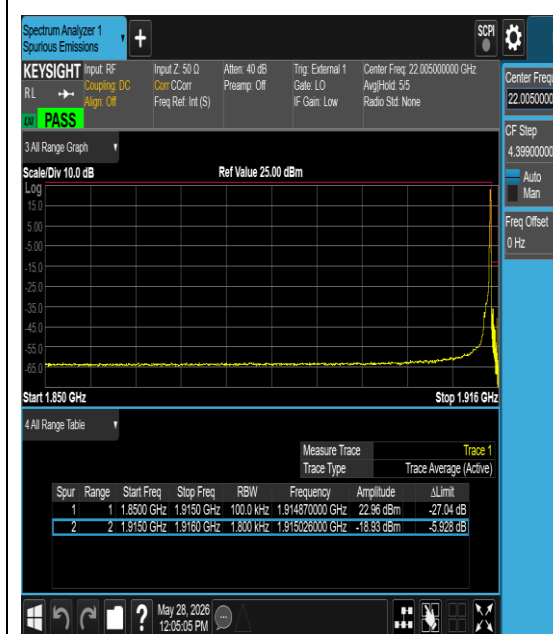
Band25-0.18-BPSK-26042-1@0-15kHz-PASS



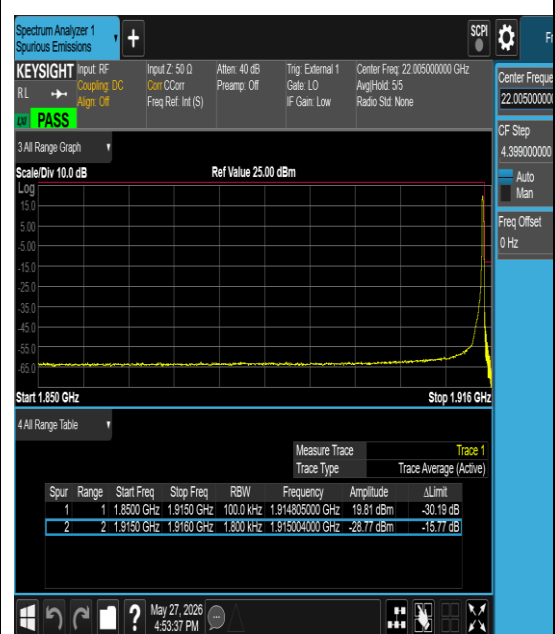
Band25-0.18-BPSK-26042-1@11-15kHz-PASS



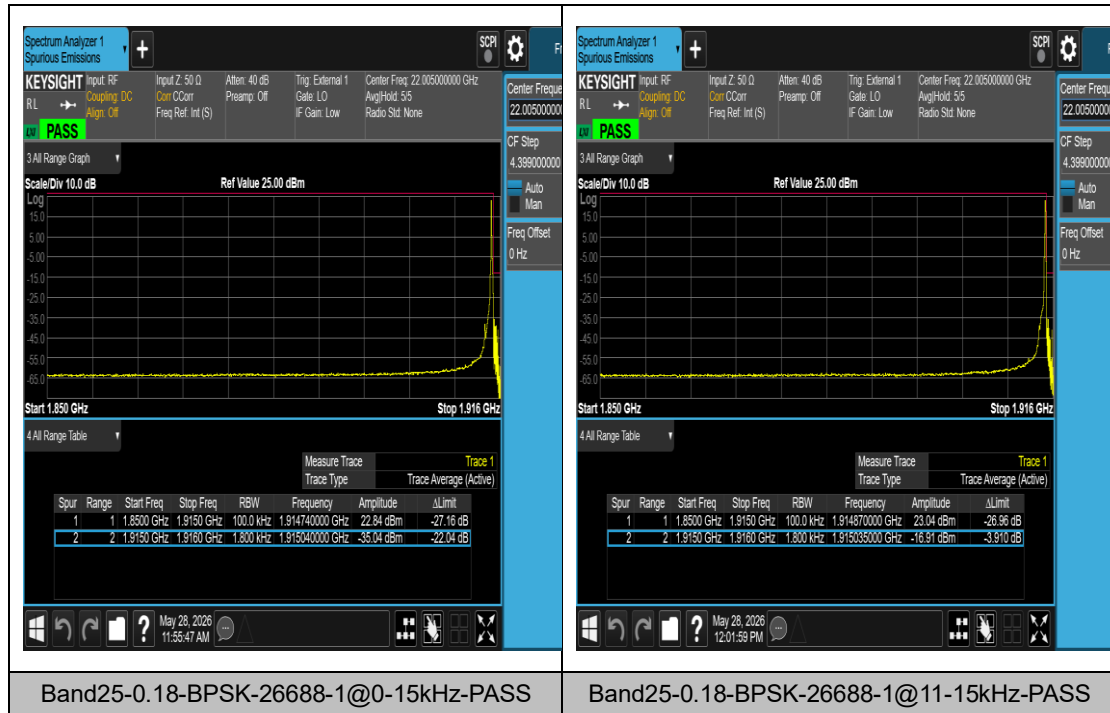
Band25-0.18-QPSK-26688-1@0-15kHz-PASS



Band25-0.18-QPSK-26688-1@11-15kHz-PASS



Band25-0.18-QPSK-26688-12@0-15kHz-PASS



Appendix E: Conducted Spurious Emission for NB1

Test Result

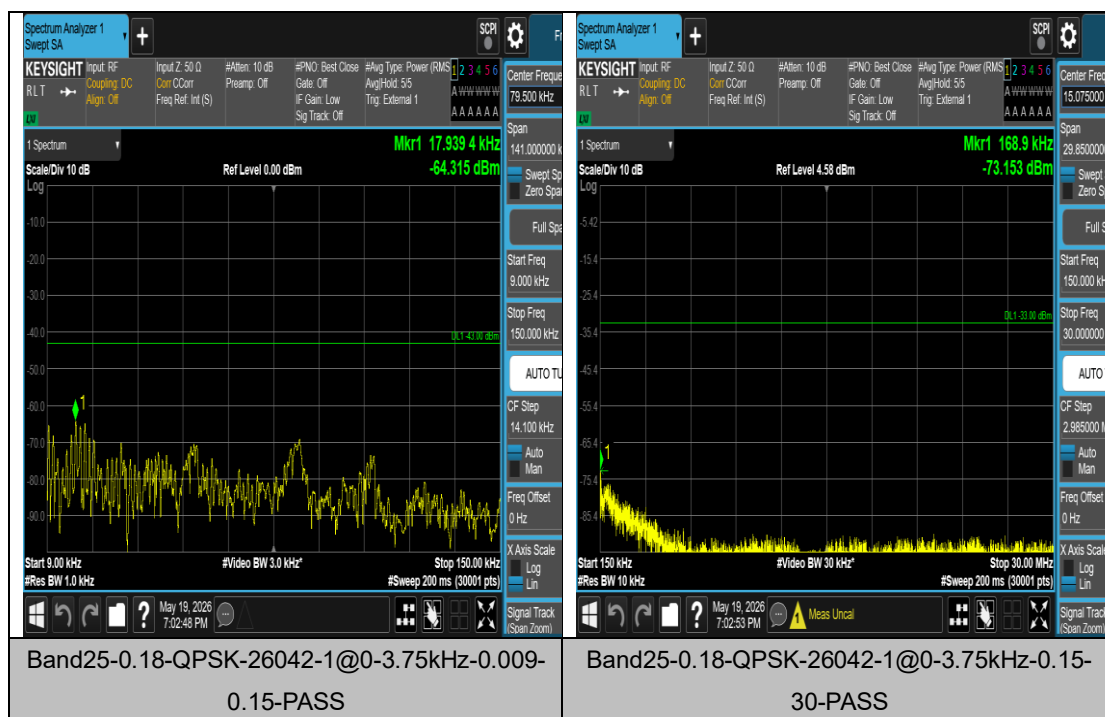
Band	OpMode	SCS	BW	Modulation	Channel	Tones	Freq Start [MHz]	Freq Stop [MHz]	Result (dBm)	Limit (dBm)	Verdict
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@0	0.009	0.15	-64.32	-43	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@0	0.15	30	-73.15	-33	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@0	30	1000	-55.06	-13	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@0	1000	20000	-50.05	-13	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@47	0.009	0.15	-59.85	-43	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@47	0.15	30	-75.64	-33	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@47	30	1000	-56.29	-13	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@47	1000	20000	-49.79	-13	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	0.009	0.15	-61.38	-43	PASS

Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	0.15	30	-71.16	-33	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	30	1000	-56.28	-13	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	1000	2000 0	-49.97	-13	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@47	0.009	0.15	-61.51	-43	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@47	0.15	30	-74.54	-33	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@47	30	1000	-56.31	-13	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@47	1000	2000 0	-49.38	-13	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@0	0.009	0.15	-60.23	-43	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@0	0.15	30	-70.16	-33	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@0	30	1000	-54.88	-13	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@0	1000	2000 0	-49.8	-13	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@47	0.009	0.15	-58.88	-43	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@47	0.15	30	-70.28	-33	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@47	30	1000	-55.08	-13	PASS
Band2 5	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@47	1000	2000 0	-49.94	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26042	12@0	0.009	0.15	-62.45	-43	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26042	12@0	0.15	30	-67.26	-33	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26042	12@0	30	1000	-56.27	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26042	12@0	1000	2000 0	-49.67	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26042	1@0	0.009	0.15	-70.14	-43	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26042	1@0	0.15	30	-72.85	-33	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26042	1@0	30	1000	-56.33	-13	PASS

Band2 5	Stand-Alone	15kHz	0.18	BPSK	26042	1@0	1000	2000 0	-49.85	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26042	1@11	0.009	0.15	-68.12	-43	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26042	1@11	0.15	30	-76.76	-33	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26042	1@11	30	1000	-55.85	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26042	1@11	1000	2000 0	-49.7	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26365	12@0	0.009	0.15	-60.33	-43	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26365	12@0	0.15	30	-64.91	-33	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26365	12@0	30	1000	-54.62	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26365	12@0	1000	2000 0	-49.98	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26365	1@0	0.009	0.15	-64.63	-43	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26365	1@0	0.15	30	-68.56	-33	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26365	1@0	30	1000	-56.32	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26365	1@0	1000	2000 0	-50.01	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26365	1@11	0.009	0.15	-67.73	-43	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26365	1@11	0.15	30	-71.76	-33	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26365	1@11	30	1000	-55.12	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26365	1@11	1000	2000 0	-49.42	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26688	12@0	0.009	0.15	-60.08	-43	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26688	12@0	0.15	30	-68.91	-33	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26688	12@0	30	1000	-54.95	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	QPSK	26688	12@0	1000	2000 0	-49.43	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26688	1@0	0.009	0.15	-82.78	-43	PASS

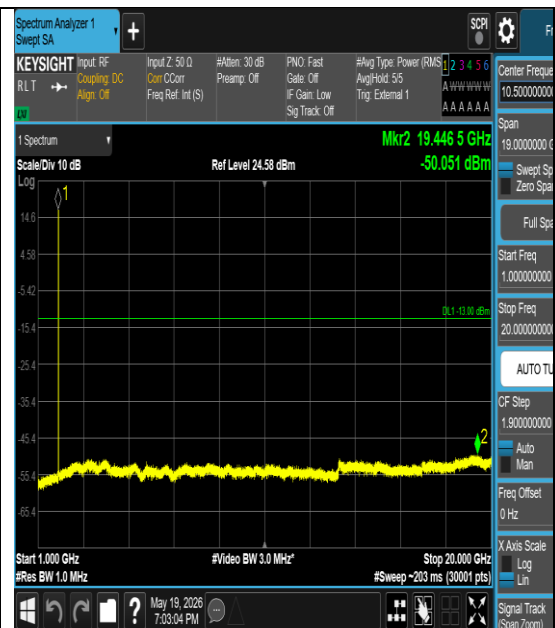
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26688	1@0	0.15	30	-77.48	-33	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26688	1@0	30	1000	-56.26	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26688	1@0	1000	2000 0	-49.95	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26688	1@11	0.009	0.15	-83.66	-43	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26688	1@11	0.15	30	-76.7	-33	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26688	1@11	30	1000	-56.31	-13	PASS
Band2 5	Stand-Alone	15kHz	0.18	BPSK	26688	1@11	1000	2000 0	-49.73	-13	PASS

Test Graphs

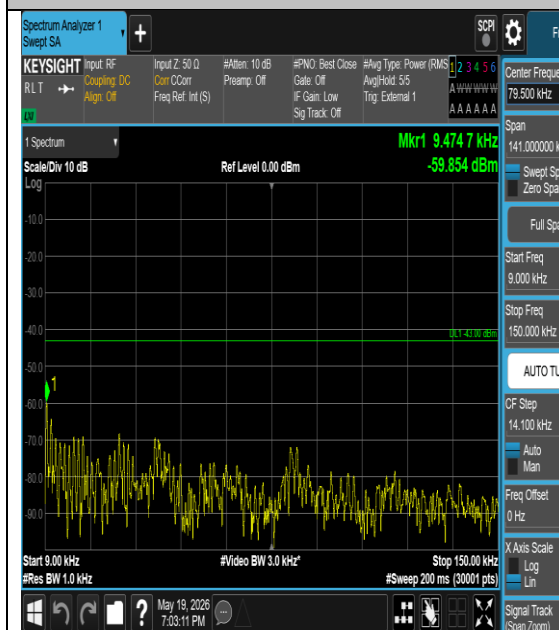




Band25-0.18-QPSK-26042-1@0-3.75kHz-30-1000-PASS



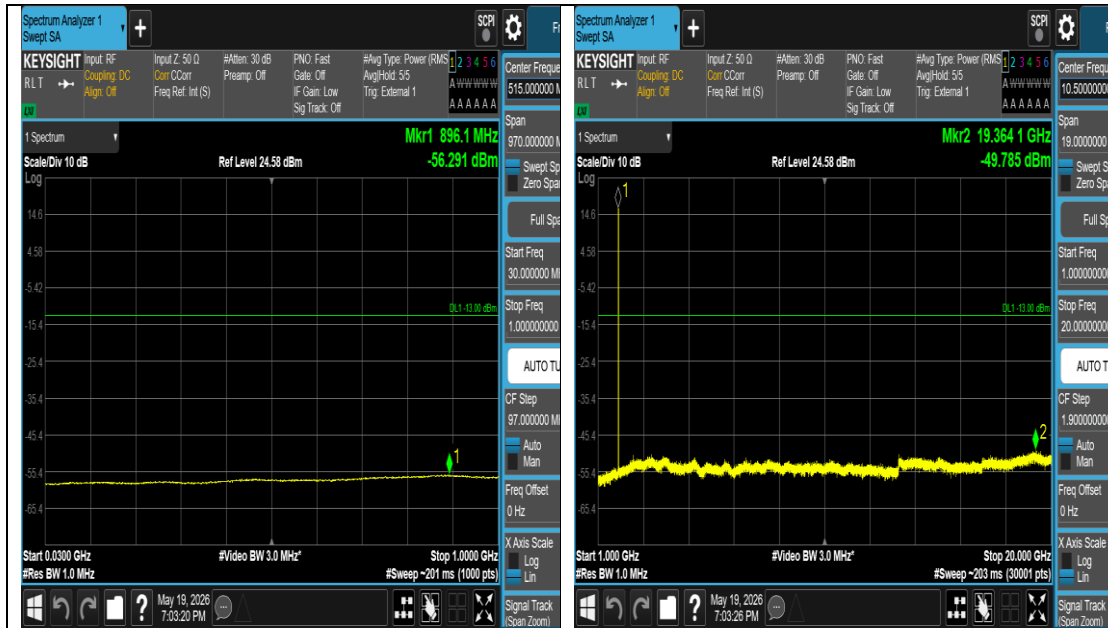
Band25-0.18-QPSK-26042-1@0-3.75kHz-1000-20000-PASS



Band25-0.18-QPSK-26042-1@47-3.75kHz-0.009-0.15-PASS

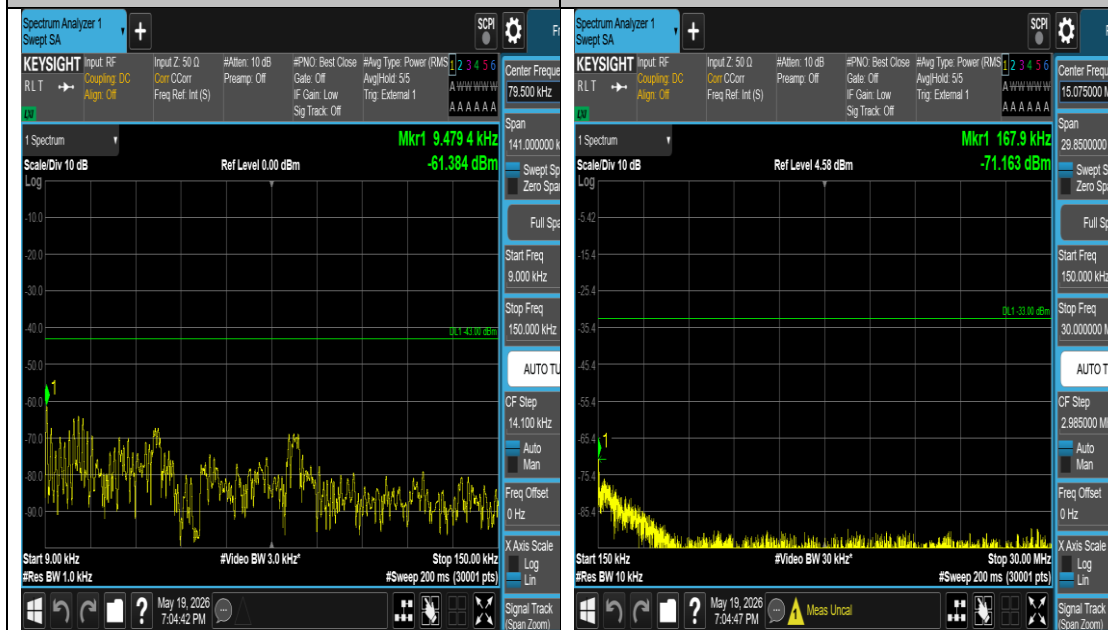


Band25-0.18-QPSK-26042-1@47-3.75kHz-0.15-30-PASS



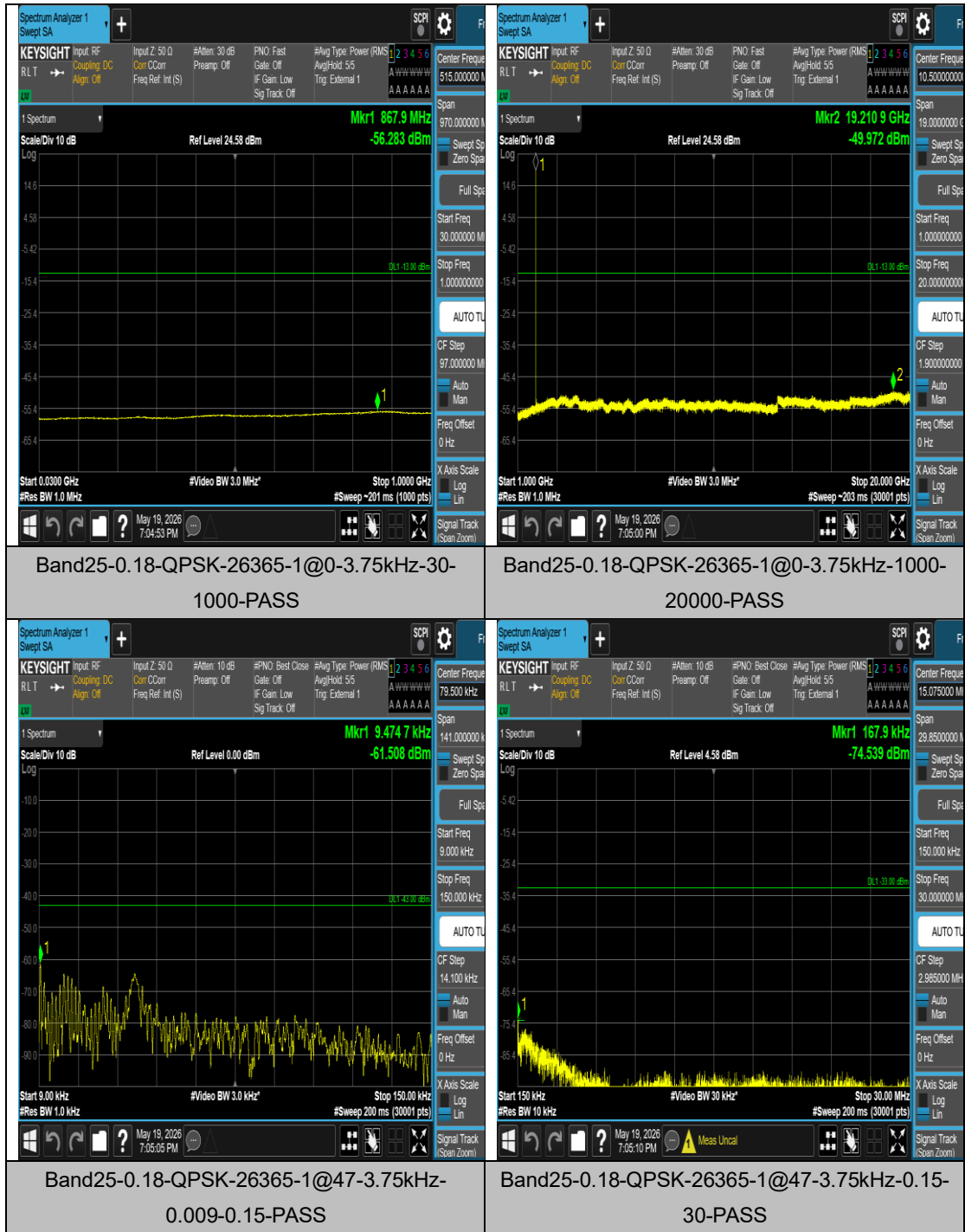
Band25-0.18-QPSK-26042-1@47-3.75kHz-30-1000-PASS

Band25-0.18-QPSK-26042-1@47-3.75kHz-1000-20000-PASS



Band25-0.18-QPSK-26365-1@0-3.75kHz-0.009-0.15-PASS

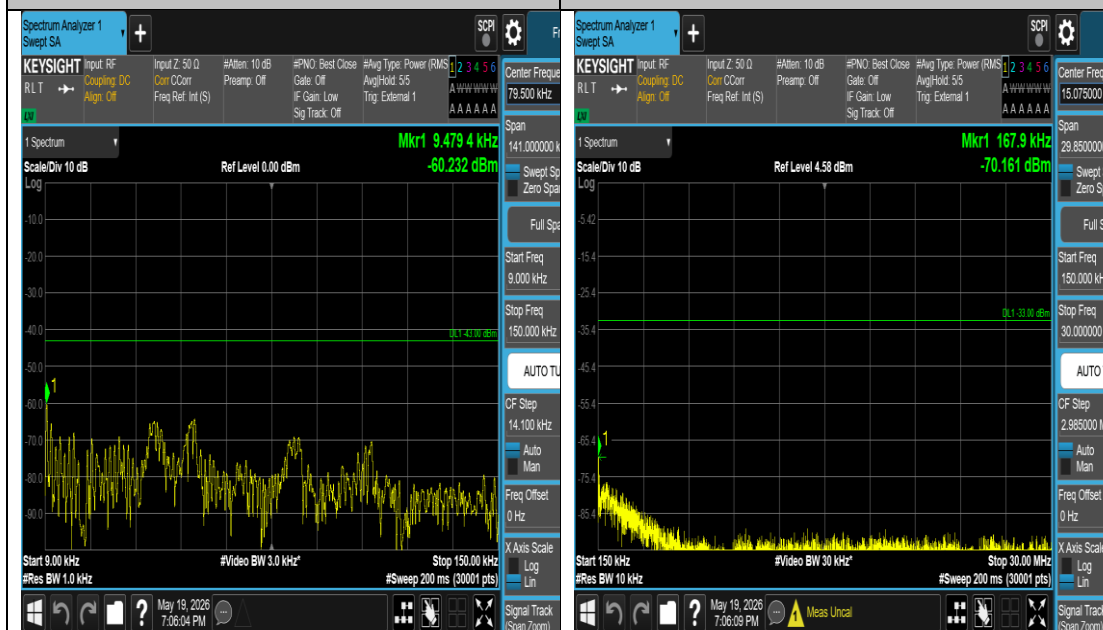
Band25-0.18-QPSK-26365-1@0-3.75kHz-0.15-30-PASS





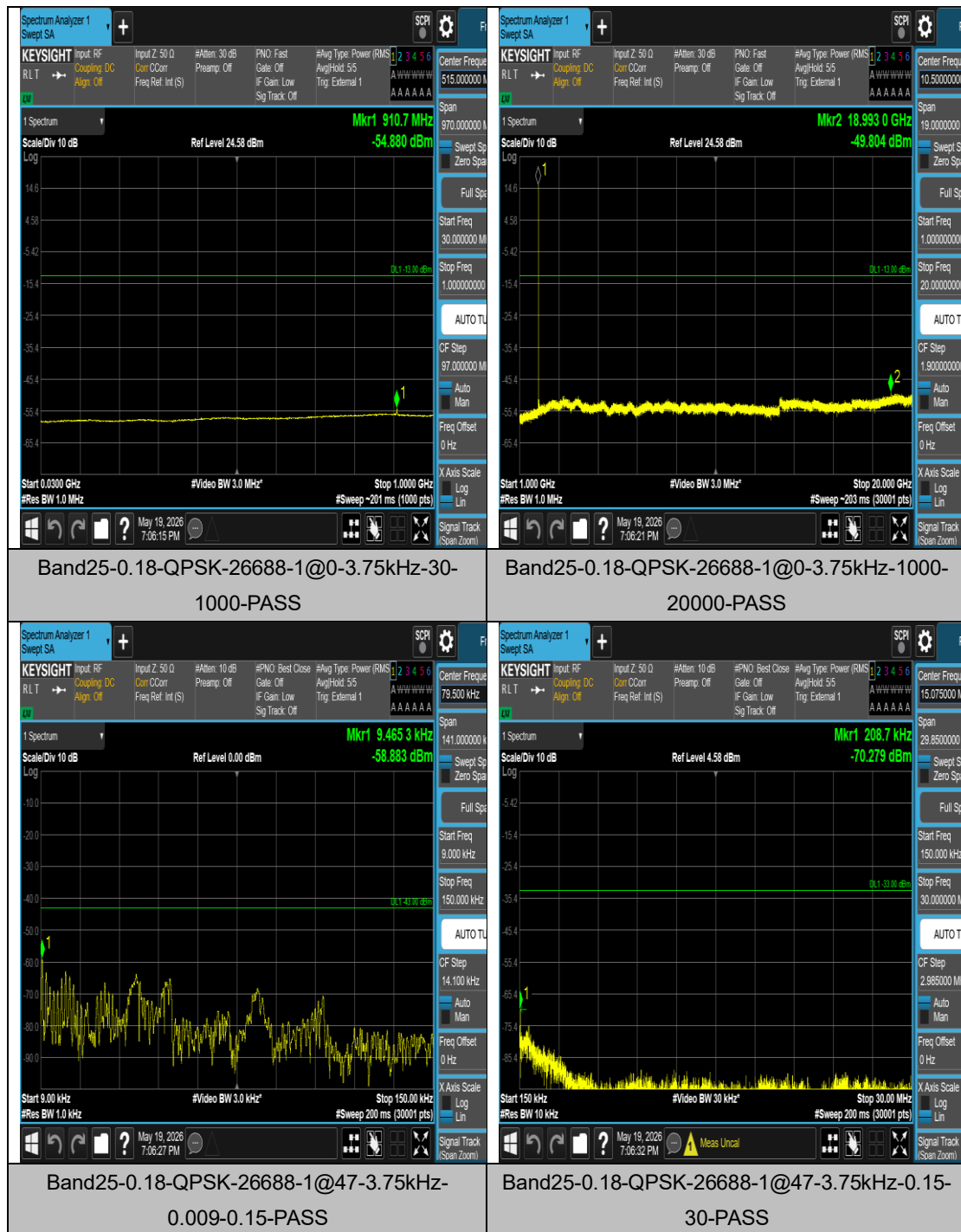
Band25-0.18-QPSK-26365-1@47-3.75kHz-30-
1000-PASS

Band25-0.18-QPSK-26365-1@47-3.75kHz-
1000-20000-PASS



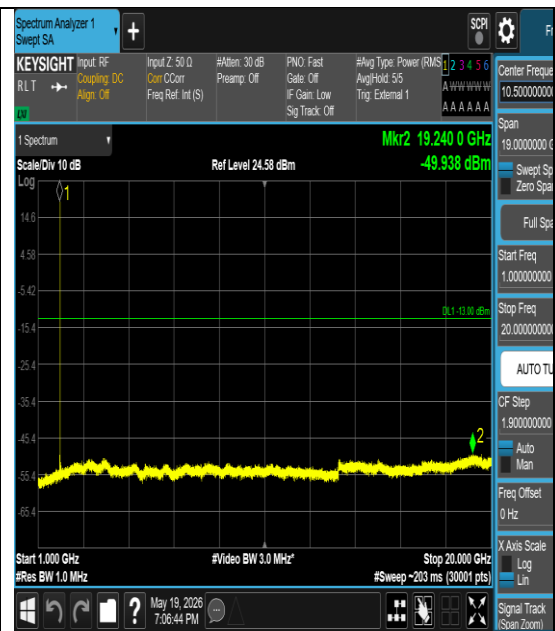
Band25-0.18-QPSK-26688-1@0-3.75kHz-0.009-
0.15-PASS

Band25-0.18-QPSK-26688-1@0-3.75kHz-0.15-
30-PASS

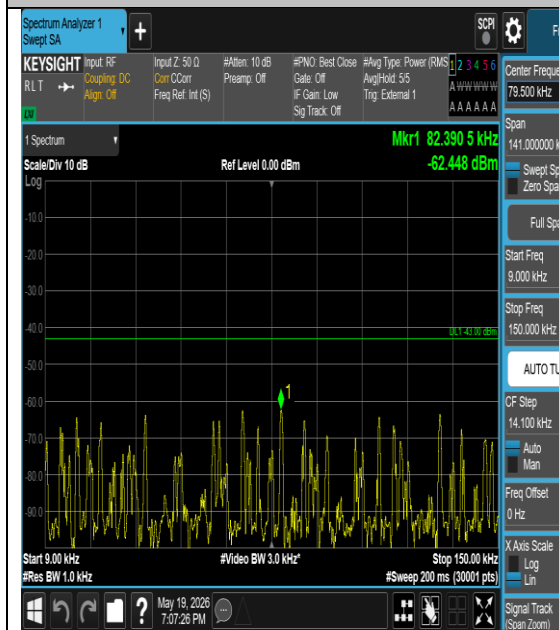




Band25-0.18-QPSK-26688-1@47-3.75kHz-30-1000-PASS



Band25-0.18-QPSK-26688-1@47-3.75kHz-1000-20000-PASS



Band25-0.18-QPSK-26042-12@0-15kHz-0.009-0.15-PASS



Band25-0.18-QPSK-26042-12@0-15kHz-0.15-30-PASS

